

Remarks

Claims 1, 4, 7, 40, 41, and 46-50 are pending in the subject application. Applicants gratefully acknowledge the Examiner's withdrawal of the objections to the claims and the rejections under 35 U.S.C. § 112, first and second paragraphs. Favorable consideration of the pending claims is respectfully requested in view of the arguments presented herein.

The specification has been amended to correct a typographical error in the filing date of a parent application for above-referenced patent application and to insert language required by 37 C.F.R. § 1.71(g). Applicants respectfully submit that no new matter has been introduced by these amendments and entry of the same is respectfully requested.

Claims 1, 4, 7, 40, 41, and 46-50 are rejected under 35 U.S.C. § 103(a) as obvious over Stanton, Jr. (U.S. Patent Application No. 2002/0039990) in view of Blumenfeld *et al.* (U.S. Patent No. 6,759,129) and further in view of Jeffreys (U.S. Patent No. 5,911,235). The Office Action asserts that the Stanton, Jr. reference teaches a method of determining the statistical significance of a difference between haplotype frequency profiles of at least two groups of individuals which includes determining the combined likelihood that the two groups of individuals are derived from the same distribution of haplotypes, determining the sum of the separate likelihoods that each of the two groups of individuals are derived from the same distribution of haplotypes, and determining the difference of the sum and combined likelihood. The Office Action further indicates that Stanton, Jr. fails to teach obtaining haplotypes for each group by genotyping the same chromosome, randomly permuting the haplotypes between the groups to determine the probability that the groups do not come from the same distribution of haplotypes, calculating all possible single-haplotype chi-square tests, or the use of a binary code to identify the haplotypes of all individuals. To cure the deficiencies noted in Stanton, Jr., the Office Action relies on the teachings of Blumenfeld *et al.* for a method of determining the haplotype frequencies of a population which include obtaining haplotypes for all individuals in each of two groups of individuals by genotyping the same gene which is located on the same chromosomal segment. The Office Action further combines Stanton, Jr. and Blumenfeld *et al.* with the teachings of Jeffreys (teaching a method of characterizing genomic DNA which includes providing binary codes for an allele or a haplotype and using that code to generate an array). Applicants respectfully traverse.

In accordance with the provisions of 35 U.S.C. § 103(c), attached with this Amendment are statements pertaining to the Exclusion of Prior Art Under 35 U.S.C. § 103(c) (CREATE Act) which have been duly executed by the Serono Genetics Institute S.A., formerly Genset S.A., and Case Western Reserve University. As required by 37 C.F.R. § 1.71(g)(1)(i), the specification has been amended to include the names of the parties and the date of the joint research agreement. It is further noted that the specification already contains a concise statement as to the field of the claimed invention at page 1 of the as-filed specification (as required by 37 C.F.R. § 1.71(g)(ii)). Accordingly, it is respectfully submitted that Blumenfeld *et al.* is not available as prior art against the currently claimed invention.

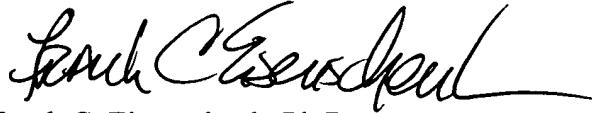
As the Patent Office is aware, each and every limitation of the claimed invention must be taught or suggested by the prior art in order to establish a *prima facie* case of obviousness for a particular invention (*In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974)). Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to the claimed invention as the teachings of Blumenfeld *et al.* are not available as prior art. Thus, a *prima facie* case of obviousness has not been raised with respect to the currently claimed invention since, as admitted in the Office Action at the paragraph bridging pages 3-4, certain elements of the claims are not taught or suggested by the combination of Stanton, Jr. and Jeffreys. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

In view of the foregoing remarks, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§ 1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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Attachment: Executed Exclusion of Prior Art Under 35 U.S.C. § 103(c) (CREATE Act)



Statement under 35 U.S.C. § 103(c)  
Examining Group 1631  
Patent Application  
Docket No. G-085US04CON  
Serial No. 09/818,260

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Cheyne D. Ly  
Art Unit : 1631  
Applicants : Nicholas J. Schork, Dani Fallin, Sebastien Lissarrague  
Serial No. : 09/818,260  
Filed : March 26, 2001  
Confirm. No. : 9223  
For : Methods of DNA Marker-Based Genetic Analysis Using  
Estimated Haplotype Frequencies and Uses Thereof

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

EXCLUSION OF PRIOR ART UNDER 35 U.S.C. § 103(c)

(CREATE Act)

Pursuant to 35 U.S.C. § 103(c), the undersigned parties respectfully submit that they should be treated as a common owner for the purposes of 35 U.S.C. 103(c)'s exclusion of prior art that is only available under 35 U.S.C. 102(e), (f) or (g) in the formulation of a rejection under 35 USC 103(a). Specifically, the undersigned parties respectfully submit that they should be treated as a common owner of U.S. Patent No. 6,528,260 B1 (to Blumenfeld *et al.*). U.S. Patent No. 6,528,260 B1 is prior art that is only available under 35 U.S.C. 102(e) and has been used in the formulation of a rejection under 35 U.S.C. § 103(a) in the above-referenced patent application.

As set forth in 35 U.S.C. § 103(c)(1)-(3),

- (c)(1) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.
- (2) For purposes of this subsection, subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if —
  - (A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;
  - (B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
  - (C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.
- (3) For purposes of paragraph (2), the term “joint research agreement” means a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.

The undersigned Parties hereby state that the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made; that the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and that the application for patent for the claimed invention has been amended to disclose the names of the parties to the joint research agreement. Accordingly, it is respectfully submitted that U.S. Patent No. 6,528,260 B1 (to Blumenfeld *et al.*) is not available as prior art.

The undersigned Parties invite the Examiner to call their representative if clarification is needed or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

SERONO GENETICS INSTITUTE S.A., FORMERLY  
GENSET, S.A.

CASE WESTERN RESERVE UNIVERSITY

By: 

By: Catherine Porto

Jürgen HASSA  
Title: Authorized representative

Title: Associate Vice President for Technology Transfer

Date: May 25, 2005

Date: \_\_\_\_\_



EXCLUSION OF PRIOR ART UNDER  
35 U.S.C. § 103(c) (CREATE Act)  
Examining Group 1631  
Patent Application  
Docket No. G-085US04CON  
Serial No. 09/818,260

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Cheyne D. Ly  
Art Unit : 1631  
Applicants : Nicholas J. Schork, Dani Fallin, Sebastien Lissarrague  
Serial No. : 09/818,260  
Filed : March 26, 2001  
Confirm. No. : 9223  
For : Methods of DNA Marker-Based Genetic Analysis Using  
Estimated Haplotype Frequencies and Uses Thereof

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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(CREATE Act)

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As set forth in 35 U.S.C. § 103(c)(1)-(3),

- (c)(1) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.
- (2) For purposes of this subsection, subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if —
  - (A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;
  - (B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
  - (C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.
- (3) For purposes of paragraph (2), the term “joint research agreement” means a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.

The undersigned Parties hereby state that the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made; that the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and that the application for patent for the claimed invention has been amended to disclose the names of the parties to the joint research agreement. Accordingly, it is respectfully submitted that U.S. Patent No. 6,528,260 B1 (to Blumenfeld *et al.*) is not available as prior art.



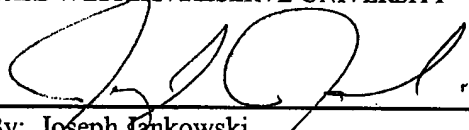
The undersigned Parties invite the Examiner to call their representative if clarification is needed or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

SERONO GENETICS INSTITUTE S.A., FORMERLY  
GENSET, S.A.

CASE WESTERN RESERVE UNIVERSITY

By: \_\_\_\_\_

  
By: Joseph Jankowski

Title: \_\_\_\_\_

Title: Assistant Vice President-Biomedical Sciences

Date: \_\_\_\_\_

Date: 07/14/05